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Bengt Holmen

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EXAMINER

MISA, JOAN D

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,138	<b>Applicant(s)</b> HOLMEN, BENGT	
	<b>Examiner</b> JOAN D. MISA	<b>Art Unit</b> 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## DETAILED ACTION

### *Claim Status*

Rejected: 1-18

### *Claim Objections*

Claims 2-18 are objected to because of the following informalities: at the beginning of each claims, the phrase "A spreader as claimed in claim..." would be best recited as "The spreader as claimed in claim...".

Claim 5 is objected to because in line 3, the phrase "and is controlled jointly or..." would be best recited as "and are controlled jointly", to be consistent with the phrase in line 2 "sections are pivotally connected..." and the rest of claim 5.

Claim 14 should be amended in the same fashion as amended claim 7 since it includes the same issues. For the purposes of this examination, claim 14 will be read similarly to amended claim 7.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarten et al. (5,569,081), hereinafter Baumgarten, in view of Matousek et al. (5,797,793), hereinafter Matousek.

Regarding claim 1, Baumgarten discloses a spreader (Figure 4, includes deviating housing 31 with guiding plates 32) arranged to move on a ground for spreading crop residues (chopped straw 7) over the ground behind the spreader, across the width that considerably exceeds the width of the spreader (as shown in Figure 1), the spreader comprising:

a spreading nozzle (refer to figs.2-4, 31) for discharging the crop residues (7).

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Baumgarten further discloses a device for correcting "wind influence on the dissipation of the chopper straw" and for providing "a uniform distribution of the chopped straw over the cutting width" (col.1, lines 52-56). However, Baumgarten fails to disclose a wind deflector included in said device.

Matousek teaches that it is desirable to provide a similar spreader (figs.5-6, 66) for a similar agricultural combine with a wind deflector (figs.5-6, wind shield or curtain 150 comprising windshields or curtains 154 attached to elongated mounts 152 ), positioned adjacent to the spreader (66) *at the discharge* of the spreading nozzle (equivalent to outlets 92 and 94), relative to a direction of movement of the spreader, the wind deflector (150) extending generally laterally away from the spreader (66), as shown in Figure 5 and disclosed in column 9, lines 45-48:

"the spreader mechanism 66 preferably includes a curtain or shield 150 that extends for a substantial distance outwardly from opposite terminal ends of the spreader mechanism 66"

the wind deflector, upon movement of the spreader preventing headwinds and/or lateral winds from affecting the spreading of the crop residues across the spreading width (col.4, lines 45-55, beginning with the phrase:

"As mentioned, windy weather conditions can, and often do, affect the distribution of residue material...";

and col.9, lines 41-44, beginning with the phrase:

"Another aspect of the present invention relates to the ability of the spreader mechanism 66 to limit the effect that windy weather conditions have on the ability to spread residue materials in a broad and substantially uniform pattern...";

and col.11, lines 42-55, beginning with the phrase:

"Furthermore, mounting the wind shield 150 in operable association with the spreader mechanism 66 can further prove useful in promoting the even distribution of residue material..."

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spreader of Baumgarten to include a wind deflector, as taught by Matousek, in order to further limit the effect that windy weather conditions have on the ability to spread residue materials in a broad and substantially uniform pattern.

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Given the combination of Baumgarten and Matousek, the wind deflector would be positioned adjacent to the spreader (31, 32 of Baumgarten) at a point upstream of the discharge of the spreading nozzle (refer to end of 31). Further explaining, since the wind deflector of Matousek is positioned adjacent to sides of the outlets (92, 94) of the spreader, it would be obvious to one skilled in the art to also position the wind deflector (150 of Matousek) adjacent to the sides of the outlet, referred to as the spreading nozzle, of the spreader (31, 32) of Baumgarten, which results in the wind deflector being "positioned at a point upstream of the discharge of the spreading nozzle", as claimed.

Regarding claim 2, the combination of Baumgarten and Matousek discloses the spreader as claimed in claim 1, connected to the rear end of a combine harvester (Figure 1, 1 of Baumgarten) for spreading the crop residues (7) exiting from a cutter (Figure 4, cutter drum 30 of Baumgarten) incorporated in the combine harvester, wherein said spreader (31) includes several spreader wings (32) pivotally mounted on said spreader to define the desired spreading width and wherein said wind deflector (150 of Matousek) is connected to said spreader or to the rear end of the combine harvester (as taught by Matousek in Figure 5).

Regarding claim 3, the combination further discloses the spreader as claimed in claim 1, wherein said wind deflector (150 of Matousek) projects essentially horizontally laterally, at least in one direction away from the spreader (31 of Baumgarten equivalent to 66 of Matousek) or the combine harvester (as shown in Figure 5 of Matousek).

Regarding claim 4, the combination further discloses the spreader as claimed in claim 1, wherein said wind deflector (150) includes at least two sections (as shown in Figure 5 of Matousek), connected to the spreader (31 equivalent to 66) or the combine harvester on both sides thereof and which project laterally therefrom in opposite directions (as shown in Figure 5 of Matousek).

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Regarding claim 8, the combination further discloses the spreader of claim 4, wherein the sections (150 of Matousek) are designed as essentially rectangular screens (as shown in Figure 5), which extend essentially vertically in the operative position, and which project laterally from the spreader (31 equivalent to 66) or the combine harvester (3). Although Matousek fails to disclose that the sections project obliquely outwards and rearwards laterally from the spreader or the combine harvester it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the sections of the wind deflector (154) to project obliquely outwards and rearwards laterally from the spreader of the combine harvester since it well within the skill of those in this art to position the wind deflector at whatever angle would best serve the purpose of deflecting the wind, and it is old and well know to optimize the design of a device for its intended purpose.

Regarding claims 11 and 12, both of which depend on claim 2, claims 11 and 12 recite substantially similar limitations to claims 3 and 4, respectively, and are therefore rejected using the same art and rational set forth above.

Regarding claim 13, which depends on claim 3, claim 13 recites substantially similar limitations to claim 4 and is therefore rejected using the same art and rational set forth above.

Claims 5, 6, 10, 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarten and Matousek, as applied to claim 4 above, and further in view of Van Der Lely (3,478,499).

Regarding claim 5, the combination of Baumgarten and Matousek discloses the spreader of claim 4, except wherein said sections (150 of Matousek as shown in Figure 5) are pivotally connected to the associated side of the spreader (66) or the combine harvester (10) and are controlled jointly or individually between an operative position, wherein they project laterally, and a position of rest and transportation, wherein they do not project laterally.

Van Der Lely teaches that it is old and well known in the harvesting art for an implement (Figure 1, mowing table 3) comprising two sections (4) to be pivotally connected to a combine harvester and

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controlled jointly between an operative position, wherein the sections project laterally (see Figure 1), and a position of rest and transportation (see Figures 3 and 5). "Thus, a combine harvester having a relatively large cutting width... can be readily converted into a transport position in which it can be readily moved from one place to another" (col.9, lines 12-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spreader wind deflector sections of the combination to be pivotally connected to the combine harvester, as taught by Van Der Lely since it is old and well known in the harvesting art to allow implements having relatively large widths to be pivotable between an operative position and a transportation position so as to be readily moved and the predicable result is a more adaptable combine harvester.

Regarding claim 6, the combination of Baumgarten, Matousek, and Van Der Lely discloses the spreader of 5, wherein said sections (150 of Matousek, as shown in Figure 5) are controllable either to be folded essentially vertically between an essentially horizontal, lower operative position (as shown in Figure 5 of Matousek equivalent to Figure 1 of Van Der Lely) and an essentially vertical upper position of rest and transportation (as shown and taught in Figures 3 and 5 of Van Der Lely), *or* are controllable for pivotal movement essentially horizontally between an essentially horizontal operative position and an equally essentially horizontal position of rest and transportation.

Regarding claim 10, the combination further discloses the spreader of claim 5, wherein control of the sections is effected by at least one of manually and pneumatically (refer to column 1/Abstract, lines 29-32 "hydraulic circuit includes gas under pressure communicating with the hydraulic cylinders" and column 7, lines 6-19 "gas together with the hydraulic circuit in communication therewith thus constitute hydro pneumatic means").

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Regarding claims 15 and 16, which depend on claims 5 and 6, respectively, claims 15 and 16, individually, recite substantially similar limitations to claim 8 and is therefore rejected using the same art and rational set forth above.

Regarding claim 18, which depends on claim 6, claim 18 recites substantially similar limitations to claim 10 and is therefore rejected using the same art and rational set forth above.

Claims 7, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarten, Matousek, and Van Der Lely, as applied to claims 5 or 6 above, and further in view of Halford et al. (5,021,030).

Regarding claim 7, the combination of Baumgarten, Matousek, and Van Der Lely discloses the spreader of claim 5, except wherein in their operative position said sections (154) are supported on the ground by supports by at least one of wheels and runners positioned at the outer free section ends.

Halford et al. teaches the use of ground supports (includes metal frame 20 and wheels 30, 31) to provide support to a spreader of a combine harvester (column 1, lines 58-61:

"a straw spreader for a similar combine harvester comprising a frame and at least one ground wheel for engaging the ground and supporting the frame at a predetermined height relative to the ground").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spreader of the combination to include ground supports made of wheels to the sections as taught by Halford et al. in order to engage the ground and support the spreader, which includes the wind shield sections at a predetermined height relative to the ground.

Regarding claim 14, claim 14 recites substantially similar limitations to claim 7 and is therefore rejected using the same art and rational set forth above.



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Regarding claim 17, which depends on claim 7, claim 17 recites substantially similar limitations to claim 8 and is therefore rejected using the same art and rationale set forth above.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarten and Matousek, as applied to claim 8 above, and further in view of Pearson (3,145,519)

Regarding claim 9, the combination of Baumgarten and Matousek discloses the spreader of claim 8, except wherein the sections of the wind deflector are interconnected by way of a section, the operative position forms an upper, essentially horizontally extending section so as to form a funnel-like, hood-shaped extension of the spreader.

Pearson teaches that it is old and well known in the harvesting art for a deflector (Figures 1-2, discharge chute 25), attached to an outlet or discharge opening (22) of a harvesting device, to comprise of three sections that form a funnel-like, hood-shaped configuration.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wind deflector of the combination to have an upper essentially horizontally extending section forming a funnel-like, hood shaped configuration with the other two sections, as taught by Pearson, since such deflector configuration is old and well known in the harvesting art and the predictable result is a more stable deflector.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection. Independent claim 1 is now rejected under Baumgarten and Matousek, which, as a combination, teaches a wind deflector (150 of Matousek) positioned adjacent to the spreader (31 of Baumgarten) at a point ***upstream*** of the discharge of the spreading nozzle (end of 31), the spreader of Baumgarten being similar to the spreader of the present invention.

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***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hyman (1850458) teaches that the use of runners (fig.1, 28) for providing support is old and well known in the harvesting art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOAN D. MISA whose telephone number is (571)270-3745. The examiner can normally be reached on Monday - Friday, 8:00am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Will can be reached on (571) 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas B Will/  
Supervisory Patent Examiner  
Art Unit 3671

JDM 10/28/2009